

COMMENTS

DRAFT ENGINEERING EVALUATION/COST ANALYSIS WORK PLAN AVERY LANDING SITE, AVERY, IDAHO (2 September 2008)

Comment Color Key

Black – EPA original EE/CA comments.

Blue – Potlatch response to EPA original EE/CA comments.

Red – EPA response to Potlatch response to EPA original EE/CA comments.

Green – EPA response to Potlatch revised EE/CA.

General Comments

1. The work plan is a document wherein the Respondent describes its proposed technical approach for completing the requirements of the SOW. It is not a document intended for statements about legal liability issues. Thus, the following revisions must be made:

- Page 1, section 1.2, 1st sentence. Change to read “The goal of this EE/CA is to assess the nature and extent of the contamination at the Site and to evaluate a limited number of removal action alternatives appropriate for addressing the contamination.” **OK**

Comment addressed.

- Page 4, section 2.2.1. Eliminate the first two sentences. **OK**

Comment addressed.

- Page 4, section 2.2.2.2. Eliminate this entire section.

Discuss. We thought it was important to include some information regarding past operations at the site for developing a conceptual site model for the Work Plan.

The discussion may be retained, provided the operational history is revised to include Potlatch activities associated with the Site, and others, as appropriate.

Comment partially addressed. Respondent should clarify (1) whether any petroleum contaminated soils or other hazardous wastes were identified and disposed of incidental to removal of the rail lines in Section 15 and 16 and the 500,000 gallon aboveground storage tank in Section 15, and (2) whether the cabin and trailer sites are on individual septic tanks or a community septic system.

- Page 4, section 2.3, 1st paragraph. Eliminate the second sentence, and note that the Federal Highway Administration is not known to own portions of the Site.

Discuss. The comment appears to address the second paragraph rather than the first paragraph. We believe that the Federal Highway Administration does own a portion of the site.

EPA has tentatively confirmed that the roadway is owned by the USFS, and is awaiting a definitive response from USFS.

Comment not addressed. The second paragraph should be revised to note that ownership remains uncertain regarding the Federal Highway Administration and/or the US Forest Service.

- Page 11, section 4.1.1. Keep only the first three sentences and then add "Potential petroleum releases are of primary concern at this property."

Discuss. Although the discussion is conjecture on possible sources, this conjecture helps develop a conceptual site model.

Disagree. As noted above, the work plan describes the proposed technical approach for completing the requirements of the SOW; it is not a document intended for statements about legal liability issues (e.g., distinguishing ownership, excluding discussion about potential Potlatch activities).

A conceptual site model does not distinguish between ownership. Rather, a conceptual site model is a functional description/illustration of the contamination problem, which describes the relationships among: locations of contaminant/waste sources or locations where contamination exists; types and expected concentrations of contaminants; potentially contaminated media and migration pathways; and potential human and ecological targets or receptors. The model is not built on statements inferring legal liability, nor does it distinguish between arbitrary ownership boundaries. As written, the section is overshadowed by statements about legal liability. It must be revised to focus only on the contamination problem as it is currently known to exist.

Comment addressed.

- Page 11, section 4.1.2. Keep only the first two sentences.

Discuss. Same as the response above.

Reply same as above.

Comment addressed.

- Page 11, section 4.1.3. Keep only the first three sentences and the fifth sentence.

Discuss. Same as the response above.

Reply same as above.

Comment addressed.

- Page 12, section 4.2.1. Revise the first sentence to "Soils have been impacted from releases of contamination at the Site."

Discuss. We believe there is little doubt that the railroad caused the releases. Potlatch has not conducted any operations at the site.

Disagree. Potlatch has owned the Site since 1980, and has not demonstrated that the contamination problem is solely attributable to railroad operations at the Site, as opposed to contributory activities by others.

Comment partially addressed. Figure 4-1 shows railroad spurs and numerous other structures present in Section 16. Thus, the sixth sentence should be revised to note that "several railroad spurs and other structures existed in the past."

- Page 12, section 4.2.2. Revise the first sentence to "Groundwater has been impacted from releases of contamination at the Site."

Discuss. Same as the response above.

Reply same as above.

Comment addressed.

- Page 19, section 4.6.3. Delete the third sentence in the second paragraph. **OK**

Comment not addressed. The subject sentence was not deleted.

2. The scope of the EE/CA must address the source, nature, and extent of contamination and human health and ecological risks for the entire Site, which includes the western portion of the Site not previously investigated. Thus, the scope must be expanded to investigate the western portion of the Site, including soil, sediment, and groundwater.

Discuss. We need to understand exactly what is meant by "the western portion of the Site".

The western portion of the Site is the area approximately downgradient of Monitoring Well HC-1R where no investigatory activities have been conducted (i.e., beneath and beyond the seasonal and year-round residences). The Site is depicted generally on the map attached as Appendix 1 to the SOW.

No response required.

Specific Comments

3. Page 1, section 1.0. Delete the last sentence and substitute the following sentence: "The EE/CA will provide definitive information on the source, nature, and extent of contamination, human health and ecological risks presented by the Site, and recommend removal action alternatives appropriate for addressing the removal action objectives."

Discuss. Our concern is in the terminology "definitive information". We would like to know what EPA means by this description.

"Definitive information" refers to information and data of sufficient quantity and quality which is suitable for final decision-making (i.e., final removal action alternative selected by EPA in the Action Memorandum).

Comment addressed.

4. Page 1, section 1.1, 1st sentence. Contaminants at the Site, known only for the eastern portion of the Site, include organic and inorganic hazardous substances and petroleum product. Thus, revise the first sentence to "The purpose of this Work Plan is to describe how Potlatch will assess the human health and environmental impacts associated with the releases of hazardous substances and total petroleum hydrocarbons from discharges at the Site in order to recommend removal action alternatives under the Comprehensive" **OK**

Comment addressed.

5. Page 1, section 1.2, 2nd paragraph. As noted above, the list of specific data needs must be expanded to include additional characterization of the western portion of the Site and other media as discussed throughout this comment letter.

Discuss. Please see our response to EPA Comment number 2 above.

Reply same as above.

Comment addressed.

6. Page 1, section 1.2, 1st paragraph. Revise the last sentence to "The EE/CA will provide definitive information on the source, nature, and extent of contamination, and human health and ecological risks presented by the Site."

Discuss. Our concern is in the terminology "definitive information". We would like to know what EPA means by this description.

Reply same as above.

Comment addressed.

7. Page 1, section 1.2, 2nd paragraph, last bullet statement. Revise the sentence to "An evaluation of the current and potential for adverse effects to human health and the environment occurring as a result of exposure to contaminants associated with the Site." **OK**

Comment addressed.

8. Page 2, section 1.2, 2nd paragraph (and page 3, 2nd paragraph). Eliminate these paragraphs (including bullet statements) and substitute the following for the 2nd paragraph, page 2: "The EE/CA development process includes the following components: site characterization; identification of removal action objectives; identification and analysis of removal action alternatives; comparative analysis of removal action alternatives; and recommended removal action alternative." **OK**

Comment addressed.

9. Page 3, Attachment E. Note that the scope of the Cultural Resources Work Plan must include coordination with the Coeur d'Alene Tribe Tribal Historic Preservation Office. **OK**

Comment addressed.

10. Page 4, Section 2.2.2.1. Delete the second and third sentence and substitute the following: "Several residents live on the Site year-round, and several more reside on the property seasonally. Access to the Site is unrestricted. The immediate area around the Site is residential, recreational, and commercial. The St. Joe River is adjacent to the Site." **OK**

Comment addressed.

11. Page 5, section 2.2.3. Insert the following bullet statement as the second statement: "The earliest documented release of petroleum product from the Site seeping into the St. Joe River was reported in June 1970."

Discuss. Our information does not support this statement. Please provide information on the documented release of petroleum product into the St. Joe River in 1970.

Copy provided via e-mail 10/12.

No response required.

12. Page 5, Section 2.2.3, 3rd bullet statement. Delete the second sentence, which is taken out of context from the cited document, and replace with the following sentence: "The site data showed the presence of organic and inorganic hazardous substances, particularly polycyclic aromatic hydrocarbon compounds in subsurface soils and groundwater." The investigation was conducted to determine the Site's Hazard Ranking System (HRS) score, and the information collected to develop HRS scores is not sufficient to determine either the extent of contamination or the appropriate response for a particular site.

Discuss.

There is nothing to discuss – the revision stands.

Comment partially addressed. Delete the 3rd sentence, and make the 4th sentence the beginning of a separate bullet statement.

13. Page 5, section 2.2.3, 4th and 5th bullet statements. Briefly describe the cleanup actions for these statements (e.g., for the 4th statement "Potlatch installed a product recovery system which included several inceptor trenches installed along the river bank.") **OK**

Comment addressed.

14. Page 5, section 2.2.3, 7th bullet statement. Provide a reference for the observed sheen and the agency/entity where the sheen was reported. **OK**

Comment addressed.

15. Page 6, section 2.4, 2nd paragraph. Reference the Idaho Water Quality Regulations instead of the Idaho Administrative Procedures Act. **OK**

Comment addressed.

16. Page 6, section 2.4, 2nd paragraph. Several special IDAPA designations are cited for the segment of the St. Joe River adjacent to the Site; however, other special designations may be present that must be cited and addressed in evaluating impacts of discharges to the river. For example, this section of the river is designated critical habitat for bull trout (Federal Register Vol. 70, No. 185). **OK**

Comment addressed.

17. Page 6, section 2.5. Add the 2007 E&E Removal Assessment Report to this section and to Section 8.0. **OK**

Comment addressed.

18. Page 7, section 2.6.1. Delete this section because issuance of a NPDES Permit is not a removal action. **OK**

Comment addressed.

19. Page 8, section 2.6.3, 1st paragraph. Indicate how much product, if any, was recovered by the “capture wells.” **OK**

Comment not addressed. The quantity of recovered product sent off-site for recovery or reuse is not provided.

20. Page 8, section 2.6.3, 3rd paragraph, 2nd sentence and 4th paragraph, last sentence. Delete these sentences because insufficient data is available to support the “consistency” interpretative statements.

Discuss. The statements were qualified as a possibility. Again, such conjecture is important to develop a conceptual site model.

Disagree. There is no rhyme or reason associated with when “observations” are made regarding the seeps. Thus, the definitive statements regarding consistency are inappropriate and must be deleted.

Comment addressed.

21. Page 8, section 2.6.3, last paragraph. The statement that oil absorbent booms have been placed around the LNAPL discharging seeps to the St. Joe River must be revised to accurately note that only occasionally, within any given year, were small sausage-shaped containment booms placed in the river with minimal (or no) maintenance and/or recovery. **OK**

Comment partially addressed. Unless Potlatch can demonstrate otherwise, the 1st sentence must be revised to note that oil absorbent booms were only occasionally placed when sheen was observed.

22. Page 11, section 4.1 (and Section 2.2.2.2). More information must be provided to support the many and varied potential source statements and conclusions, including detail about what is known about specific railroad operations (including references) and detailed site map(s) showing historic features relative to current property boundaries.

Discuss. We can provide additional information, but the discussions regarding sources and analytical results are important to develop the conceptual site model and establish potential contaminants of concern for focusing EE/CA investigations and treatability studies.

As discussed above, a conceptual site model is a functional description/illustration of the contamination problem. The model is not built on statements inferring legal liability, nor does it distinguish between arbitrary ownership boundaries. As written, the section is overshadowed by statements about legal liability. Thus, this section must be revised to focus only on the contamination problem as it is currently known to exist.

Comment addressed.

23. Page 12, section 4.2. The media are discussed in terms of the type of contamination and concentrations relative to EPA and Idaho standards; however, other than the EPA 2007 removal assessment, the source of the data is not specified. Cite all data relied on to support the interpretation of media impacted. **OK**

Comment may be partially addressed. For example, limited reference to documents other than the 2007 E&E report are made to support interpretations of media impacted. Thus, the Respondent should revisit this section and ensure that all historical information including IDEQ, URS, and Hart Crowser are appropriately reflected in this section.

24. Page 12, section 4.2.1, 2nd sentence. The State of Idaho does not have promulgated "risk-based target levels for diesel and heavy oil petroleum hydrocarbons and polynucleated aromatic hydrocarbons (PAHs)." Rulemaking to establish standards and procedures for application of risk-based corrective action at petroleum release sites is undergoing public comment. Thus, the second sentence must be revised to accurately reflect the status of the proposed rule. Moreover, the target levels are guidance only and are for specific chemicals such as benzene and toluene, as opposed to diesel and heavy oil petroleum hydrocarbons and polynucleated aromatic hydrocarbons. **OK**

Comment not addressed. The subject sentence has not been deleted.

25. Page 12, section 4.2.2, 1st paragraph, 4th sentence. Revise this sentence to accurately note that observations made by START in 2007 show that the areal extent of free product present on both the Bencik property and the Potlatch property are similar. **OK**

Comment addressed.

26. Page 12, Section 4.2.2, 1st paragraph, 10th sentence. Describe the data supporting the interpretation that the thickness of the floating product is overall thinner than that observed on the water table in Section 15. **OK**

Comment addressed.

27. Page 12, section 4.2.2, 2nd paragraph, 4th sentence. Revise this section with respect to the clarification provided below:

- With the exception of EMW-02 and EMW-06, all groundwater samples were collected with a peristaltic pump and a low flow method to minimize disturbance to the water formation during sampling.

Discuss. We agree that using low flow techniques may disturb groundwater less during sampling, but this is not conclusive to our concern. We would like to discuss the details of the sampling effort.

START-3 will be made available to discuss details of the sampling effort.

No response required.

- Water quality monitoring data (including turbidity) was collected during groundwater sampling, and that data will be forwarded to Golder Associates.

Discuss. We would be pleased to receive turbidity measurements on the groundwater samples.

START-3 will be made available to discuss details of the sampling effort.

No response required.

- During the 2007 removal assessment, START did not collect any groundwater samples underneath a floating LNAPL layer. Several of the new EPA monitoring wells (including EMW-02, EMW-04, EMW-5, and EMW-06) were installed within the free product area, a conclusion that was based on the observation of free product in the soil borings during monitoring well installation. However, when the groundwater samples were collected from these monitoring wells, no free product was detected or observed on the groundwater table, which was attributed to the fact that the free product in the area of the monitoring wells had been dispersed by the installation of the monitoring wells.

Discuss. We would like to know more about these observed conditions to better understand the possible causes.

START-3 will be made available to discuss observed conditions.

No response required.

28. Page 13, section 4.2.3, 3rd sentence. Provide documentation substantiating the statement that the impermeable wall constructed along the St. Joe River appeared to eliminate the oil sheen until 2005 (e.g., written monitoring procedures, field notes documenting implementation of the procedures, etc.). **OK**

Comment addressed.

29. Page 13, section 4.3, 1st paragraph. Delete this paragraph. It is premature to state that the main constituents of potential concern are diesel and heavy oil given that the source, nature, and extent of contamination and human health and ecological risks for the entire site have not been previously investigated (see Comment No. 2 above). In addition, the cited report, which contains the results of a study of natural background soil metals concentrations in Washington State, whereas, there are other more relevant documents which must be considered, including those related to the many and varied studies occurring in the Coeur d'Alene Basin such as the *Final Technical Memorandum (Rev. 3): Estimated Background Concentrations in Soil, Sediment, and Surface Water in the Coeur d'Alene and Spokane River Basins* (URS Greiner and CH2M Hill, 2001). Moreover, the referenced information must be supported by site-specific data yet to be collected to demonstrate that metals found on-site are typical of the immediate area before rejecting as soil COPCs.

Discuss. Although there are concerns at the site for PAHs, PCBs and metals in groundwater, we feel that the main issues at the site are from diesel and heavy oil releases at the site. The other potential constituents at the site are addressed in the following paragraphs. We will add additional references to support our conclusions about typical metal concentrations in background soils.

IDEQ Comment. (No. Site-specific information must be gathered.).

Comment not addressed. The 1st sentence must be revised to reflect that it is not known whether any COPCs or other contaminants are present at the western portion of the Site.

30. Page 13, section 4.3, 4th paragraph. The discussion of PCB in groundwater should also include the Idaho risk-based level of 0.0279 ug/L for PCBs (one groundwater sample contained Aroclor 1260 at a concentration of 0.028 J ug/L).

Discuss. The one groundwater sample containing 0.028 µg/L PCB concentration is about 18 times below that Federal and State of Idaho Drinking Water Standard of 0.5 µg/L. We feel that previous investigations support the contention that PCBs are not an issue in groundwater.

Okay, with respect to only the eastern or upstream portion of the Site. The Milwaukee Railroad was an electrified segment in the vicinity of the Site. Railroad companies used PCBs in on-board transformers in electric locomotives (and other electrical equipment).

Comment not addressed. It is not clear how the Respondent can elect to use risk-based target levels for soil, but ignore risk-based target levels for groundwater.

31. Page 13, section 4.3, 5th paragraph. Clarify the statement regarding the questionable validity of the arsenic groundwater data. **OK**

Comment not addressed. As noted in Comment No. 27 above, water quality monitoring data was provided to the Respondent. Thus, it is now known whether the metal concentrations (particularly arsenic) are questionable with respect to turbidity levels and the subject paragraph can be revised to reflect this information.

32. Page 14, section 4.4, 1st paragraph. The following statement must not be relied upon to disregard potential mobility of metals in the subsurface environment at the site, "Many metals, such as lead, have a high absorption on most soils and typically are immobile in subsurface environments." Much data has recently been collected on the mobility of metals, including lead, in subsurface environments in Lake Coeur d'Alene. Thus, the generalized statement regarding immobility must be deleted.

Discuss. The statement is general and qualified as "most". A discussion of persistence and mobility are important to develop the conceptual site model. Lead is "typically" immobile in subsurface environments as expressed in numerous studies, although unusual geochemical environments such as the example mentioned about deep lakes having reducing biological conditions at depth would be considered "non-typical" for this site. In any case, metals, including lead will be analyzed in site groundwater to better understand its presence and mobility.

No comment.

No response required.

33. Page 15, section 4.5.2 (and section 4.5.5). This section and section 4.6.2 state that the potential for human and ecological receptors to be exposed to near surface soils by direct contact and ingestion requires further evaluation; however, neither section 4.6.1 nor 5.3 include soil sampling. Thus, the work plan must be revised to include soil sampling to address this acknowledged data gap.

Discuss. We feel that sufficient information exists for near surface soils to further evaluate risks and make a decision for a removal action. Please see our response to EPA Comment number 2.

Not responsive. On one hand, the EE/CA WP states "requires further evaluation," yet on the other hand, additional soil sampling is not required. Potlatch must clarify what "requires further evaluation" means.

Comment addressed.

34. Page 16, section 4.5.3. Present the data on which the following statement is made "The greatest thickness and quantities of free product LNAPL today, and in the past, were in areas within the Bencik-owned and Federal Highway Administration-owned property and may have migrated and spread along with groundwater flow to impact the water table within the Potlatch-owned property." **OK**

Comment addressed.

35. Page 16, section 4.5.3. Clarify the following statement "According to the EPA START-3 Report, the size of the floating free product LNAPL appears to have increased in aerial extent from 2000 to 2007, but the location of the new EPA borings and monitoring wells in areas not previously investigated may account for some of the apparent increase." **OK**

Comment addressed.

36. Page 16, section 4.5.4. As noted above, turbidity monitoring results gathered during groundwater sampling will be provided to Golder Associates. **OK**

No response required.

37. Page 16, section 4.6, 1st paragraph. Revise this introductory paragraph to accurately reflect previous comments regarding the goal and objectives of the EE/CA process as presented above. **OK**

Comment addressed.

38. Page 17, section 4.6, 1st paragraph. As noted in section 3.4.1 of the work plan, the fill materials extend 18 feet below ground surface (BGS). Given that groundwater is approximately 10 to 16 feet BGS, the free phase product is in the fill material, unless the depth of the native soils varies over the site. Because the soil type will have a significant affect on the migration and recoverability of free product in the subsurface, a thorough characterization of the fill itself, and the location of the interface between the fill and the native soils, must also be investigated.

Discuss. Determining the elevation of the native soil horizon at the site is very difficult with high certainty. The existing test pit logs and borehole logs and the proposed boreholes and treatability study excavations will be used to understand the variation in the surface of the native soils. Some potential removal actions may not depend on this information. More refinement, if necessary to make a decision on removal actions, could be an additional phase of investigation.

Only one additional well is proposed, and the WP is unclear what will trigger an additional phase of investigation. See also Comments 43 and 49 below.

New Comment. This section must be revised to reflect data needs for the western portion of the Site.

39. Page 17, section 4.6.1, 2nd paragraph. Delete this paragraph. Where standards such as chemical-specific applicable or relevant and appropriate requirements (ARARs) (or risk-based chemical concentrations should be used when potential ARARs for chemical of concern do not exist for a specific contaminant), for one or more contaminants in a given medium are clearly exceeded, a removal action is generally warranted, and further quantitative assessment that considers all chemicals, their potential additive effects, or additivity of multiple exposure pathways, are generally not necessary. Thus, in this instance, the streamlined risk evaluation will evaluate “unacceptable risks” with respect to ARARs and if appropriate, other advisories, criteria, and guidance. **OK**

Comment addressed.

40. Page 17, section 4.6.2, 1st paragraph. Delete the first paragraph, and note that the removal action objectives (RAOs) will be developed to correspond to the appropriate subsections of 300.415(b)(2) of the National Contingency Plan (NCP).

Discuss. We will refer to the cited NCP section in the text, but we thought it important to focus the purpose of removal actions that may be applicable to this site. We propose to qualify other removal actions objectives by adding “but not limited to” to the last sentence of the paragraph.

Not acceptable – delete.

Comment addressed.

41. Page 18, section 4.6.2, 2nd paragraph. EPA guidance clearly states that the EE/CA should concentrate on only a few viable alternatives relevant to the EE/CA objectives should be identified and analyzed. Moreover, EPA guidance states that whenever practicable, the alternatives selection process should consider CERCLA preference for treatment over conventional containment or land disposal approaches to address the principal threat at a site. Thus, the identification and analysis of removal action alternatives will be limited to only a few viable alternatives consistent with CERCLA’s preference for treatment.

Discuss. We have listed many possible removal actions for the site, but many of these may be screened out based on treatability studies prior to the detailed evaluation.

Disagree. Document need only address statement above without listing everything imaginable that may be selected for the Site.

Comment addressed.

42. Page 18, section 4.6.2, 3rd paragraph. Delete this paragraph. As noted above, a limited number of removal action alternatives appropriate for addressing the RAOs will be identified and evaluated against the short- and long-term aspects of three broad criteria: effectiveness, implementability, and cost.

Discuss. We are not sure what concern EPA’s comment is addressing.

The statement has nothing to do with the section. Moreover, the EE/CA will evaluate removal action alternatives with respect to the removal action scope, goals, and objectives.

Comment addressed.

43. Page 19, section 4.6.3, 2nd paragraph. This section and others discuss the potential for a phase II investigation and/or multiple sampling events. Describe in greater detail what criteria will compel an expanded characterization strategy.

Discuss. Additional investigations are always possible and depend on the results of the proposed investigation. It is difficult to predict all possible criteria that will trigger additional investigations, but we will indicate in the Work Plan that once the data have been obtained and evaluated, we will discuss with EPA the need for additional investigations.

Not responsive. Must provide some sense of what will trigger an expended investigation. My concern is absent such criteria, the Respondent will propose an “easy out” alternative.

Comment addressed.

44. Page 20, section 5.3. The discussion of proposed field investigations must be revised to reflect prior work plan comments and to include sediment sampling as shown by Figure 5-1. **OK**

Comment partially addressed. This section has not been revised to include sediment sampling.

New comment. The four proposed soil sampling locations are biased to historical main rail line and spur rail lines railroad at the far western end of the Site. However, when comparing Figure 4-1 with Figure 5-1, the proposed soil sampling locations will not address the Site in proximity of the historic turntable south toward the St. Joe River and west/southwest toward the western end of the Site. Given the historic use of this area including turntable-related tracks and many unknown structures evidenced by Figure 4-1, several additional soil sampling locations must be added to the proposed activity (perhaps as many as four to six additional soil samples).

New comment re Section 5.3.2 (Additional Monitoring Well Installation. An additional groundwater monitoring well is recommended to be installed north of DW-01 for reasons similar to those discussed in the preceding new comment.

45. Page 22, section 5.3.3, 1st paragraph, 5th bullet statement. Please note that ESB-03 was a soil boring and not a groundwater monitoring well. **OK**

Comment addressed.

46. Page 23, section 5.3.5. Near shore floating LNAPL and surface water sampling must be conducted at river flows and ground water levels expected to cause the greatest river discharges, and not simply timed to coincide with ground water sampling. This approach will enable a proper evaluation of effects of discharges to the St. Joe River. **OK**

Comment addressed.

47. Page 24, section 6.0. The purpose of this section is not clear, thus clarify the intent (e.g., is the intent to present an iterative process underlain by a series of technical memoranda or an EE/CA report abridged outline consistent with EPA policy and guidance? **OK**

Comment addressed.

48. Page 24, section 6.0, *Evaluation*. Revise this section to include treatability testing. **OK**

Comment not addressed. This section was not revised to include treatability testing.

49. Page 26, section 7.0. This section, along with section 5.3.4, discusses the potential for multiple sampling events. Describe in greater detail what criteria will trigger an expanded characterization strategy.

Discuss. Please see our response to EPA Comment Number 43.

See comment above.

Comment addressed.

50. Figures. Where appropriate, revise all site figures to show the entire Site and proposed sampling activities and locations including the western portion.

Discuss. Please see our response to EPA Comment number 2 above.

See comment above.

Comment addressed.

51. Figure 7-1. Revise the schedule and listed tasks to include all significant project deliverables such as the EE/CA sampling and analysis plan, biological assessment work plan, and cultural resources work plan. In addition, please note that the plan and report submittals are not required by Ecology.

Discuss. We will remove the reference to Ecology and change to EPA and include more detail on support plans, BA and cultural resource plans.

Comment partially addressed. Schedule does not include preparation of a draft treatability study work plan. In addition, schedule should include submission of a technical memorandum discussing the proposed removal action alternatives to be evaluated based on effectiveness, implementability, and cost.